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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/631,835 -

07/31/2003

Davide Galletti

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EXAMINER

HUSON, MONICA ANNE

ART UNIT

PAPER NUMBER

1732

MAIL DATE

DELIVERY MODE

06/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/631,835

Applicant(s)

GALLETTI, DAVIDE

Examiner

Monica A. Huson

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
4a) Of the above claim(s) 6-9 and 12-47 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-5, 10 and 11 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date: 20070605
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

This office action is in response to the Amendment filed 28 August 2006.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the first recesses" in line 19. There is insufficient antecedent basis for this limitation in the claim. (Note that there is antecedent basis for a first recess, but not necessarily first recesses.)

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Gross (U.S. Patent 6,682,678). Regarding Claim 1, Gross shows that it is known to carry out a molding method carried out by a mold for a conventional injection press (Abstract), characterized in that it comprises the

following steps: a displacement step of a sliding element provided with impressions and disposed between the fixed part and the mobile part in a first position relatively respect to the fixed and mobile parts (Figure 9: slide=100, fixed=96, mobile=112), a defining step of a first recess by coupling said fixed and said mobile parts with the sliding element and at least an external rested movable insert (Figure 9: insert=110; recess=hollow area in which part 44 is formed), wherein the first recess is defined by at least a portion of the surface of the sliding element, and a portion of the surface of the insert (Figure 9, element 100, 110, 44); a first injection step in said first recess, after which a first molded part of said piece remains fixed on a surface integral to said sliding element (Figure 9, element 44; Figure 10, elements 100 and 72 remain fixed together after injection); an opening step of at least a movable insert which formed said first recess (Figures 9-10; element 110 is opened (i.e. withdrawn); a further displacement step of said first part of this piece in a second position through translating movement of said sliding element with respect to the fixed part of the mold (Figure 10, element 100 slides upward relative to the fixed part of the mold, which places the molded part in a different relative position than prior to the sliding movement); a defining step of a second recess by coupling said fixed and mobile parts with said sliding element and said first molded part (Figure 10, element 100, 92, 112, 72), wherein the second recess is defined at least by a portion of the surface of the sliding element, and a portion of the surface of the fixed and/or mobile parts (Figure 10, second recess=hollow area between elements 100, 92, 112, 72), and a second injection step into the second recess (Column 8, lines 56-61).

Regarding Claim 2, Gross shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the surface integral to the sliding element is an outer surface of the sliding element (Figure 9, element 100, the outer surface of the sliding element is the surface facing the mold cavity, not interior to the mold (i.e. facing toward the fixed mold)).

Regarding Claim 3, Gross shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the surface integral to the sliding element comprises an insert (Figure 9, element 100, the sliding element can be interpreted as an insert since it is inserted (i.e. projected) into the mold cavity).

Regarding Claim 4, Gross shows the process as claimed as discussed in the rejection of Claim 1 above, including a method comprising steps for carrying out various operations complementary to the molding operations (Figures 9-10; the movement of the mold pieces is complementary to the molding operations in that the movements provide necessary cavities for subsequent molding steps).

Regarding Claim 10, Gross shows the process as claimed as discussed in the rejection of Claim 1 above, including a method comprising a first injection step of an injectable materials in said first recess (Figure 9, element 44), to realize inner gaskets (Figure 9, element 76); a cooling step of said injected material (Column 8, lines 21-22; formation of the member inherently includes some cooling); a step of opening said mould (Column 8, lines 23-28; the mold will inherently be opened for the replacement of the mold pieces); a removal step of feedheads with extractors and an opening step of said movable inserts which formed said first recesses (Column 8, lines 23-28; it is being interpreted that when the mold is opened and the appropriate mold parts are withdrawn, sprue material at the feed locations will be severed (i.e. removed); the inserts open (relative to their closed configuration) when they are removed from the mold arrangement)); a re-entry step of said extractors and displacement step of said sliding elements to define said second recess (Figure 10; element 122 enters the mold, and sliding element 100 is displaced to define the second recess); a second injection step of an injectable material in said second recess, which takes place after having previously closed said mould (Column 8, lines 57-61); a cooling step of said material injected into said second recess (Column

9, lines 23-24; formation of the member inherently includes some cooling); a step of opening said mould (Column 9, lines 23-26); a displacement of said sliding elements to return to an initial position; removal of feedheads and of said finished piece; an advancing step of said movable inserts and of sliding back of said extractors; a closing step of said mould, which coincides with a start of cycle step (Column 15, lines 24-26; it is being interpreted that for each cycle, the mold parts will move to their respective locations for the particular step in the molding process, including the very first step of a molding cycle).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gross, in view of Nishida et al. (U.S. Patent 6,365,083). Gross shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show further recesses which can accommodate further injection steps. Nishida shows the process as claimed as discussed in the rejection of Claim 1 above, including a method characterized in that it comprises further injection steps in further recesses (Column 6, lines 44-46). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to follow Nishida's teaching of further recesses and injection steps during Gross' molding method in order to enable the production of more complicated (i.e. layered) articles using the same multi-step molding process.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gross, in view of Applicant's Background Information. Nishida shows the process as claimed as discussed in the rejection of Claim 10 above, but he does not show using trolleys in conjunction with the sliding elements. Applicant discloses in his Background Information that the state of the art molds can include sliding elements that are mounted on sliding trolleys, where said trolleys slide back slipping off said sliding elements from said articles (Page 3, lines 9-26). Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use conventional trolleys in order to aid Nishida's sliding elements in order to make the molding process run as smoothly as possible.

Response to Arguments

Applicant's arguments with respect to claims 1-5, 10, and 11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patent is cited to further show the state of the art with regard to multi-step molding processes in general:

U.S. Patent 6,756,004 to Davis, Jr. et al.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH**

shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A. Huson whose telephone number is 571-272-1198. The examiner can normally be reached on Monday-Friday 7:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Monica A Huson

June 5, 2007